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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/745,228	12/20/2000	Tara L. Cobble	00-400	7531
719	7590	03/26/2004	EXAMINER	
CATERPILLAR INC. 100 N.E. ADAMS STREET PATENT DEPT. PEORIA, IL 616296490			CHARIOUI, MOHAMED	
			ART UNIT	PAPER NUMBER
			2857	

DATE MAILED: 03/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/745,228	COBBLE ET AL.	
	Examiner	Art Unit	
	Mohamed Charioui	2857	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 December 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. **Claim 32** is objected to because of the following informalities: In page 38, line 23, change "author and is displayed" to –author is displayed--. Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson et al. (US 6,081,798) in view of Ruppelt (US 6,571,236).

As per claims 1, 3-6, 10, 12, 19 and 34, Johnson et al. teach authoring a case base (see col. 3, lines 20-34); providing an external source containing service information related to the work machine (see col. 14, line 65 to col. 15, line 18).

Johnson et al. fail to teach that as a function of input from the author, providing a link within the case base to related information contained in the external source.

Ruppelt teaches this feature (see col. 3, lines 29-35). It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate Ruppelt's teaching into Johnson et al.'s invention, because it would provide the user with a link to the network to retrieve documents containing information related

to the machine. Therefore, the user would be able to accurately and efficiently resolve the machine problem.

As per claims 2, 20, 21 and 35, Johnson et al. further teach authoring at least one system functional test (see col. 22, line 52 to col. 23, line 8).

As per claims 7-9 and 40-42, Johnson et al. further teach receiving feedback from the diagnostic delivery system and wherein the feedback is incorporated into future case bases (see col. 2, line 55 to col. 3, line 13).

As per claim 11, Johnson et al. further teach providing a main utility menu (see col. 16, lines 30-41).

As per claims 13, 14, 30 and 31, Johnson et al. further teach a presentation interface that contains window, tabs and pointer buttons (see col. 40, lines 10-24).

As per claims 15-17 and 32, Johnson et al. further teach selecting menu options, inserting and displaying information (see col. 15, line 34 to col. 16, line 50).

As per claims 18, 22-29, 33 and 36-39, Johnson et al. further teach authoring a case base (see col. 3, lines 20-34); authoring at least one of a system functional test and a diagnostic procedure, as a function of input from the author (see col. 22, line 52 to col. 23, line 8). providing an external source containing service information related to the work machine (see col. 14, line 65 to col. 15, line 18); delivering the case base electronically for publication (see col. 3, lines 20-35), delivering the case base to one of a diagnostic delivery system and a service advisor and receiving feedback from the one of a diagnostic delivery system and a service advisor and wherein the feedback is incorporated into future case bases (see col. 2, line 55 to col. 3, line 13).

Johnson et al. fail to teach that as a function of input from the author, providing a link within the case base to related information contained in the external source.

Ruppelt teaches this feature (see col. 3, lines 29-35). It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate Ruppelt's teaching into Johnson et al.'s invention, because it would provide the user with a link to the network to retrieve documents containing information related to the machine. Therefore, the user would be able to accurately and efficiently resolve the machine problem.

Prior art

3. The prior art made record and not relied upon is considered pertinent to applicant's disclosure:

Heckerman et al. ['374] disclose method for case-based reasoning utilizing a belief network.

Li ['050] discloses vehicle warranty and repair computer-networked system.

Allen ['218] discloses autonomous learning and reasoning agent.

Bauman et al. ['756] disclose artificial intelligence software shell for plant operation simulation.

Cunningham et al. ['199] disclose automatic design process and apparatus.

Contact information

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohamed Charioui whose telephone number is (571) 272-2213. The examiner can normally be reached on 9-6 M-F.


Art Unit: 2857

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S Hoff can be reached on (571) 272-2216. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mohamed Charioui

3/13/04


MARC S. HOFF
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